

**Iowa Public Television
Replacement of Analog UHF transmitters
FY 2006 Budget Request**

Transmitter	Power	Estimated Replacement Cost
KRIN - Waterloo	120 kilowatt	\$ 791,000
KSIN - Sioux City	120 kilowatt	\$ 791,000
KQIN - Davenport	30 kilowatt	\$ 430,000
		<u>\$ 2,012,000</u>

The Waterloo, Sioux City and Davenport analog transmitters are the transmitters that IPTV would replace first. The Waterloo and Sioux City transmitters are two of our oldest transmitters and require the most in on-going maintenance costs. The Davenport transmitter as currently configured is only capable of generating 2% of its authorized power. As a result, there are many viewers in the population center not receiving a television signal from the KQIN transmitter.

These three transmitters serve the three largest population centers of the six analog transmitters that IPTV requested funds to replace.

Iowa Public Television - WTH

KDIN-D.C
 BPEDT19981119KG
 Latitude: 41-49-47 N
 Longitude: 093-36-56 W
 ERP: 966.00 kW
 Channel: 50
 Frequency: 689.0 MHz
 AMSL Height: 886.0 m
 Antenna COR: 24.38 m
 Elevation: 305.0 m
 Horiz. Pattern: Omni
 Vert. Pattern: Yes
 Elec Tilt: 0.75
 Prop Model: Longley/Rice
 Climate: Cont temperate
 Conductivity: 0.0050
 Dielec Const: 15.0
 Refractivity: 311.0
 Receiver Ht AG: 10.0 m
 Receiver Gain: 0 dB
 Time Variability: 90.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

